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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/982,527 | 10/19/2001 | Gunnar-Marcel Klein | 178/50504 | 7253 |

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EXAMINER

SAVAGE, MATTHEW O

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1723

DATE MAILED: 04/01/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/982,527

Applicant(s)

KLEIN, GUNNAR-MARCEL

Examiner

Matthew O Savage

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 13-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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Applicant's election with traverse of group I and the species in which successive layers are joined together by surface pressure during a folding process in Paper No. 6 is acknowledged. The traversal is on the ground(s) that due consideration has not been given to the features recited in the method and apparatus claims. This is not found persuasive because as explained in the restriction requirement, the apparatus could be used in a materially different process other than the process as claimed, and the process could be carried out by another and materially different apparatus, as claimed.

The requirement is still deemed proper and is therefore made FINAL.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 12 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification fails to adequately disclose the method of joining the filter media together by surface pressure during folding.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4, 6-9, and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Concerning line 2 of claim 4, "the inflow side" lacks antecedent basis.

Regarding line 1 of claims 6 and 8, "the center layer" lacks antecedent basis.

On line 2 of claim 10, "the outflow side" lacks antecedent basis.

With respect to claim 12, it is unclear as to what joint structure "successive layers of filter media are joined together by surface pressure during folding" implies.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5, 6, 8, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Chilton et al.

With respect to claim 1, Chilton et al disclose a filter element (see FIG. 4) wherein a plurality of successive layers 54, 56, 58 of filter media follow one another in a direction of flow through the filter, all of the layers consisting of synthetic fibers (see line 23 of col. 4), the successive filter media layers exhibit respective degrees of filter fines that increase in the direction of flow through the filter (see lines 16-60 of col. 5), at least one filter media layer 54 arranged on an inflow side being composed of a meltblown non-woven web (see lines 22-28 of col. 5).

Concerning claim 2, Chilton et al disclose synthetic fibers being polyester fibers (see line 23 of col. 4).

As to claim 3, Chilton et al disclose the melt blown non woven web as being made of polyester fibers.

Regarding claim 5, Chilton et al disclose three successive layers of filter media 54, 56, 58.

As to claim 6, Chilton et al disclose the center layer 56 as being composed of a polyester non woven web.

Concerning claim 8, Chilton et al disclose the center layer 56 as being composed of a melt blown non woven web.

As to claim 10, Chilton et al disclose the filter layer 58 on the outflow side of the filter element as being composed of a melt blown polyester non woven web.

Claims 1-3, 11, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Okumura et al.

With respect to claim 1, Okumura et al disclose a filter element (see FIGS. 2 and 5) wherein a plurality of successive layers 11, 1 of filter media follow one another in a direction of flow through the filter, all of the layers consisting of synthetic fibers (see line 22 of col. 3), the successive filter media layers exhibit respective degrees of filter fines that increase in the direction of flow through the filter (see lines 16-60 of col. 5), at least one filter media layer 54 arranged on an inflow side being composed of a meltblown non-woven web (see line 40 of col. 3).

Concerning claim 2, Okumura et al disclose synthetic fibers being polyester fibers (see line 19 of col. 3).

As to claim 3, Okumura et al disclose the melt blown non woven web as being made of polyester fibers (see lines 19 and 40 of col. 3).

As to claim 11, Okumura et al discloses the filter media as being folded into a star shape (see FIG. 5).

Concerning claim 12, Okumura et al discloses successive layers of filter media that are joined together by surface pressure during folding since the media is pleated.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chilton et al.

With respect to claims 4, 7, and 9, Chilton et al fail to specify the recited density and density values for the inflow side/layer and center layer, however, such a modification would have been obvious in order to optimize the filter for a particular application.

Claims 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okumura et al in view of Chilton et al.

With respect to claim 5, Okumura et al fail to specify three successive layers of filter media. Chilton et al disclose three successive layers of filter media 54, 56, 59 and suggests that such an arrangement improves both the particle retention capacity and service life of the filter. It would have been obvious to have modified the filter of Okumura et al so as to have included three successive layers as suggested by Chilton et al in order to improve the particle retention capacity and service life of the filter.

Concerning claims 6, 8, and 10, Chilton et al disclose inflow side, center, and outflow side layers that are formed of a melt blown polyester web.

With respect to claims 7 and 9, Okumura et al and Chilton et al fail to specify the recited density and density value for the inflow side/layer, however, such a modification would have been obvious in order to optimize the filter for a particular application.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew O Savage whose telephone number is 703-308-3854. The examiner can normally be reached on Monday-Friday, 6:00am-2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda W. Walker can be reached on 703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 703-

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872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

M. Savage
Matthew O Savage
Primary Examiner
Art Unit 1723

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March 24, 2003